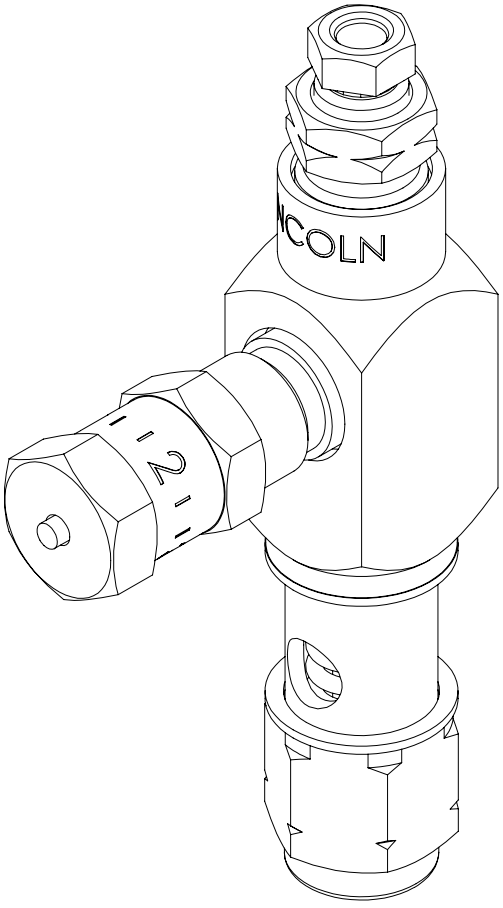
User and maintenance instructions

SL-43 injector

Models 83660, 83661 series “D”



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Contents

* Indicates change.

EC Declaration of Incorporation*

Manufacturer: SKF
5148 N. Hanley Road
St Louis, MO U.S.A.
URL: SKF.com
Phone: 314-679-4200

EU Contact: SKF
Heinrich-Hertz-Straße 2-8
69190 Walldorf
Phone: 49 (0) 6227-33259

Description: Metering valve
Product: SL-43
Models: 83660, 83661
Year of construction: *see type identification plate*
complies with all basic requirements of the following directives at the time when first being launched in the market.

Report No.'s: NA

The equipment indicated on this declaration complies with the following directives:

Machinery Directive 2006/42/EC

And was evaluated using the following harmonized EN standards:

EN ISO 12100:2010, EN ISO 4413:2010, EN 349

SKF declares under its sole responsibility that the
SL-43 injector models 83660, 83661
are in conformity with the Machinery Directive 2006/42/EC.

In the case of modifications or alterations of the above mentioned machine not authorized by the manufacturer, validity of this EC Declaration of Conformity will cease. The person empowered to assemble the technical documentation on behalf of the manufacturer is the head of standardization;
see EC-representative's address.

Brad Edler
Manager Product Development
Product Engineering LPD North America
Innovation and Product Management
January 2020

* Indicates change.

Safety

Read and carefully observe installation instructions before installing/operating/troubleshooting assembly. Assembly must be installed, maintained and repaired exclusively by persons familiar with instructions.

Install assembly only after safety instructions and guide have been read and are completely understood.

Adequate personal protection must be used to prevent splashing of material on skin or in eyes.

Always disconnect power source (electricity, air or hydraulic) from pump when not in use.

Equipment generates very high grease pressure. Extreme caution should be used when operating this equipment as material leaks from loose or ruptured components can inject fluid through the skin and into body. If any fluid appears to penetrate skin, seek attention from doctor immediately.

Do not treat injury as simple cut. Tell attending doctor exactly what type of fluid was injected.

Any other use not in accordance with instructions will result in loss of claim for warranty or liability.

- Do not misuse, over-pressurize, modify parts, use incompatible chemicals, fluids, or use worn and/or damaged parts.
- Do not exceed stated maximum working pressure of pump or of lowest rated component in system.
- Always read and follow fluid manufacturer's recommendations regarding fluid compatibility, and use of protective clothing and equipment.
- Failure to comply may result in personal injury and/or damage to equipment.

Explanation of signal words for safety

NOTE

Emphasizes useful hints and recommendations as well as information to prevent property damage and ensure efficient trouble-free operation.

⚠ CAUTION

Indicates a dangerous situation that can lead to light personal injury if precautionary measures are ignored.

⚠ WARNING

Indicates a dangerous situation that could lead to death or serious injury if precautionary measures are ignored.

⚠ DANGER

Indicates a dangerous situation that will lead to death or serious injury if precautionary measures are ignored.

Specifications

Output	Adjustable from 0.001 to 0.008 in^3 *(0,016 to 1,31 cm^3)*
Operating pressure	750 to 1 000 psi *(51 to 69 bar)*
Recommended operating pressure	850 psi *(58 bar)*
Recharge pressure	150 psi *(10 bar)*

NOTE

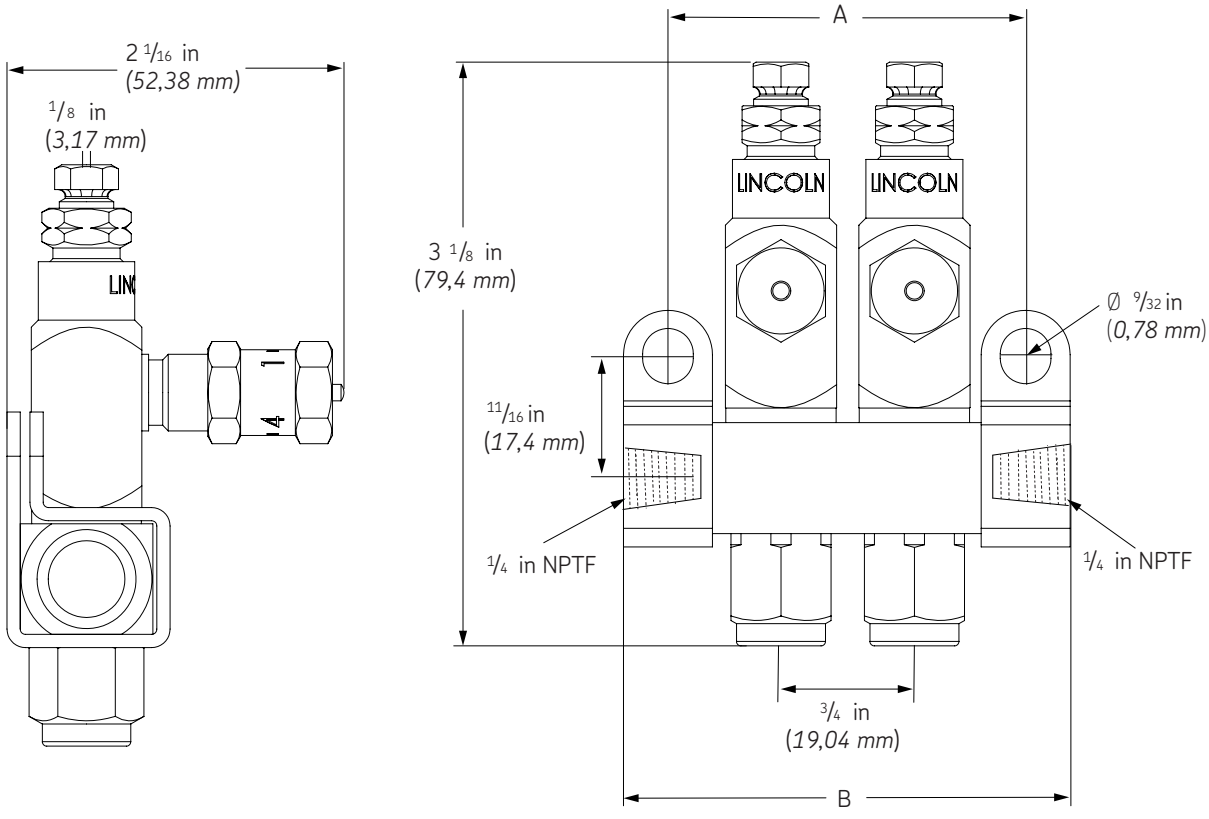
May be used in a system with SL-41, SL-42 or SL-44 Injectors.

NOTE

Injector used for dispensing oil.

Fig. 1

Dimensions



Manifold chart

Model	Description	Dimension A	Dimension B	Manifold
83661-1	1 unit	1 1/4 in *(32 mm)*	1 3/4 in *(44 mm)*	91883-1
83661-2	2 units	2 in *(51 mm)*	2 1/2 in *(64 mm)*	91884-1
83661-3	3 units	2 3/4 in *(70 mm)*	3 1/4 in *(83 mm)*	91885-1
83661-4	4 units	3 1/2 in *(89 mm)*	4 in *(102 mm)*	91886-1

Operation

Supply line under pressure

Normal operating pressure 850 psi *(586 bar)*.

Lubricant pressure moves plunger to force lubricant in discharge chamber through outlet check valve to the feed line.

Lubricant from supply line charges measuring chamber.

Supply line vented

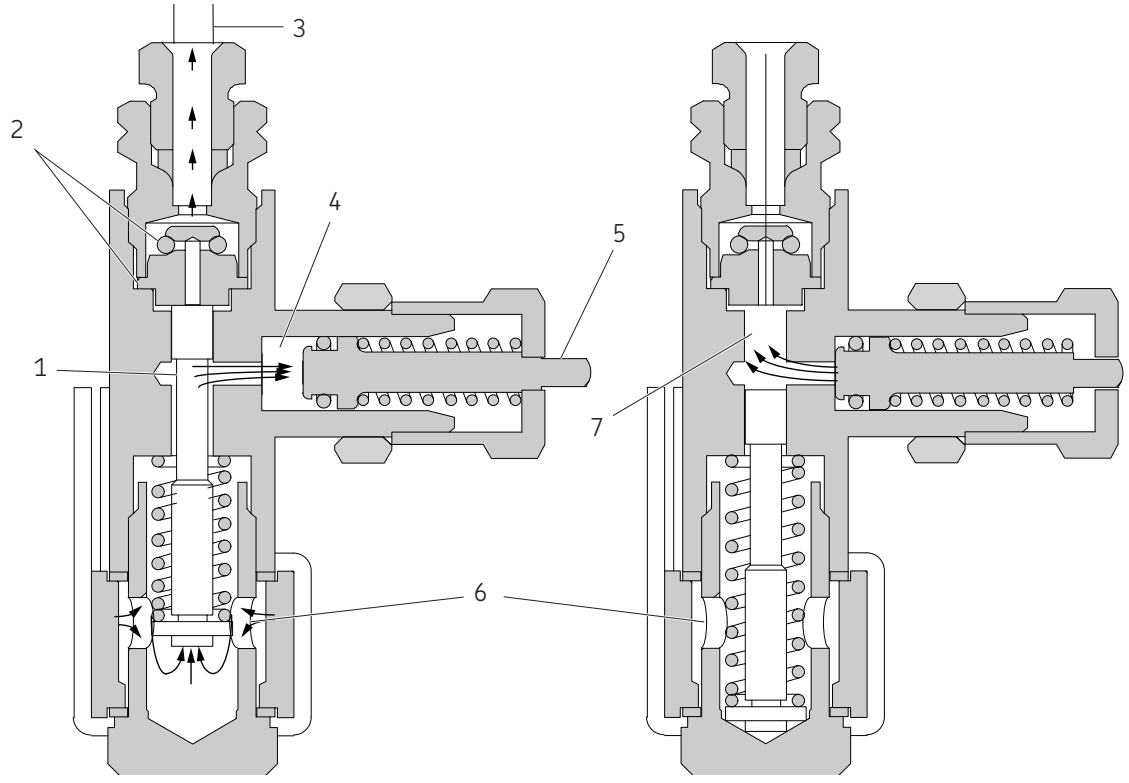
Vent pressure 150 psi *(10 bar)* maximum.

Plunger returns to normal position after supply line is vented, connecting measuring chamber to discharge chamber.

Flow from feed line is blocked by outlet check valve.

Lubricant is automatically transferred from measuring chamber to discharge chamber.

Fig. 2



Item	Description
1	Plunger
2	Outlet check valve
3	Feed line to bearing
4	Measuring chamber
5	Indicator stem movement indicates injector cycle
6	Supply line from pump
7	Discharge chamber

Injector adjustment

Injector output is controlled by position of indicator cap that limits travel of indicator piston.

To achieve advertised minimum output setting (0.001 in^3 *(0.016 cm^3)*) hand tighten indicator cap against stop then loosen approximately 1/2 turn.

Retracting indicator cap five full turns from hand tight position permits a maximum output of 0.008 in^3 (*0.131 cm^3*) to be dispensed.

Use graduations on cap as aid in setting indicator.

When injector has been adjusted for proper lubricant output, lock nut is tightened against face of indicator cap.

NOTE

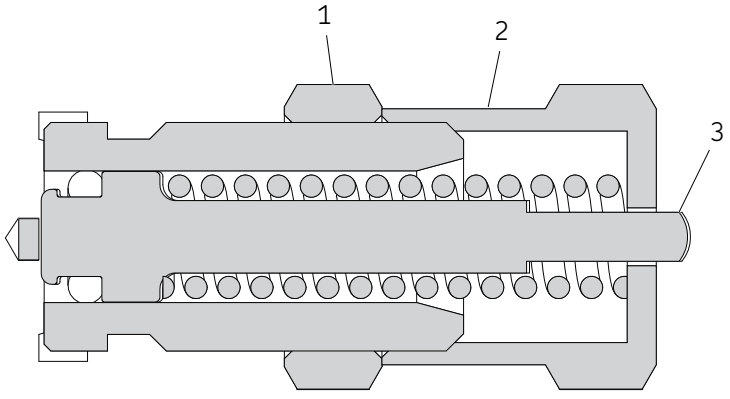
Any output setting below 1/2 turn should be monitored to verify actual output volume.

⚠ CAUTION

Indicator cap must not extend beyond retracted postion of indicator stem.

Failure to comply may result in light personal injury or damage to equipment.

Fig. IPB 1



Service parts

Item	Description	Part number	Quantity	Item	Description	Part number	Quantity
1	Lock nut	51119	1	10	Packing (Nitrile)	34837 [1] [2]	1
2	Injector cap	247942 [1] [2]	1	11	Spring	247855 [1] [2]	1
3	Piston	247851 [2]	1	12	Gasket	31137 [2]	2
4	Compression nut assembly	83924	1	13	Spring	55326 [1] [2]	1
5	Compression nut	14658	1	14	Adapter	14176	1
6	Ferrule	14659	1	15	Mounting screw	50006	2
7	Outlet body	14986	1	16	Manifold clip	45926	2
8	O-ring (Nitrile)	34499 [1] [2]	1				
9	Check seat	237883 [1] [2]	1				

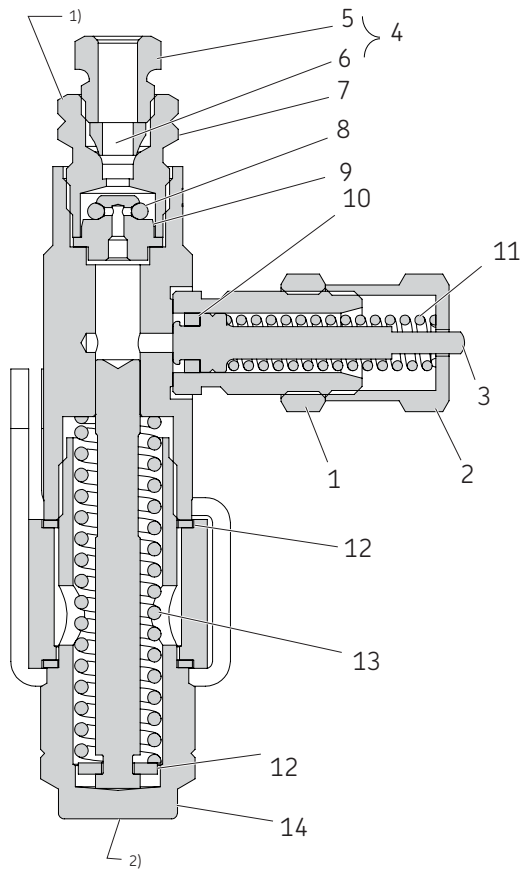
[1] Included in 247962 repair kit.
[2] Included in 247955 upgrade kit.

NOTE

Injectors from previous series can be improved with stenciled cap and single piece piston by use of 247955 upgrade kit.

Fig. IPB 2

Model 83660 series "D" replacement injector assembly, extended position

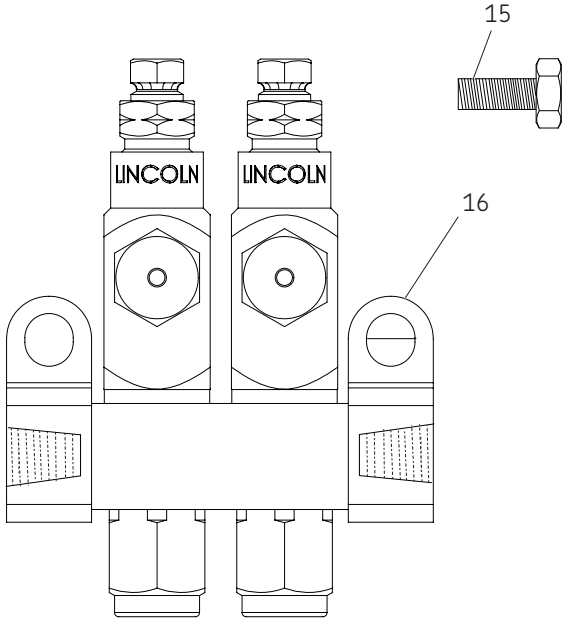


1) Torque to 10 ft.lbf *(13 Nm)*.
2) Torque to 15 ft.lbf *(20 Nm)*.

NOTE

Identification groove on piston indicator corresponds to models 83660 and 83661 only.

Fig. IPB 3



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Warranty

The instructions do not contain any information on the warranty. This can be found in the General Conditions of Sales, available at: www.lincolnindustrial.com/technicalservice or www.skf.com/lubrication.

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